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- (71) Applicant (for all designated States except US): **BRITISH NUCLEAR FUELS PLC** [GB/GB]; 1100 Daresbury Park, Daresbury, Warrington, Cheshire WA4 4GB (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHAN, Henry, Boso** [GB/GB]; 10 Longcroft Grove, Audenshaw, Manchester M34 5SD (GB). **HALL, Raymond** [GB/GB]; Nexia Solutions, B170, Sellafield Works, Seascale Cumbria CA20 1PG (GB).
- (74) Agent: **HARRISON GODDARD FOOTE**; Belgrave Hall, Belgrave Street, Leeds LS2 8DD (GB).
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(54) Title: TREATMENT OF ELEMENTAL MERCURY

(57) Abstract: The invention concerns a method for the stabilisation and disposal of elemental mercury, the method comprising treating the elemental mercury with a cementitious particulate filler material which additionally comprises an immobilisation treatment. In a preferred embodiment, the immobilisation treatment comprises an amalgamation treatment prior to the treatment with a cementitious particulate filler material. Preferably, the amalgamation is carried out using copper powder and dilute nitric acid and the cementitious particulate filler material comprises a mixture of Ordinary Portland Cement and Blast Furnace Slag. The method of the invention is carried out conveniently and rapidly, and the end product, after allowing to cure, is non-toxic, insoluble in water, easily handled, and immediately suitable for disposal. The method is particularly applicable to the safe disposal of elemental mercury which is contaminated with radioactive materials.



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